## **Jeopardy Assessment**

for the Proposed Incidental Taking Authorization of the Butler's Garter Snake

Beloit Avenue Bike Trail Relocation Project Milwaukee County, Wisconsin

## **Background**

The state-threatened Butler's garter snake is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

## Jeopardy Assessment

The proposed Beloit Road Avenue Trail Relocation involves extending a new ten foot wide asphalt bike path from the existing bike path on the west to a newly constructed trail underpass under Beloit Avenue which was constructed when the bridge over the Root River was replaced in 2004. The new path to the underpass will be situated at the toe of the Beloit Avenue fill embankment and run parallel to Beloit Avenue on both the northerly and southerly sides of the road. The total new length of the trail is approximately 600 feet.

The trail relocation project was initially approved by the Department back in 2002 as part of the Beloit Avenue bridge replacement and road expansion project. At the time, no Butler's gartersnake habitat was expected to be impacted by the proposed work. However, the bike trail relocation work did not occur when the road expansion project occurred, and the disturbance and subsequent habitat restoration work following the road expansion created suitable snake habitat that is now part of a Tier 3 habitat site along

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the Root River corridor. This site has since become occupied by the Butler's gartersnake. To minimize the take of the snake, a snake removal was required in the area where the new trail will be relocated. Snake removal work was completed in June of 2007. The following condition must be met in order for the pending Incidental Take Authorization (ITA) to be issued and remain in effect

## Required Condition:

1. Maintain the existing snake fencing to prevent snakes from re-entering the construction areas on both the north and south sides of Beloit Avenue. These fences must be maintained during the snake's active period (March 15 through Nov. 5) until the bike trail and revegetation of the area has been completed.

The department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part.

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